

California SCHIP Caregivers' Perceptions of Dental Care

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Purpose

- Goal: To develop a survey to assess consumer experiences with dental care and plans as part of the Consumer Assessment of Healthcare Providers and Systems (CAHPS) project
- Focus → Plans that provide dental benefits for children
 - Primary Interest: Medicaid / SCHIP
 - Second Interest: Commercial plans

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Primary Study Objective:

- Evaluate beta version of the survey in a sample of 2001-2002 enrollees in the California SCHIP program
- Evaluate survey psychometric properties
 1. Item missing data
 2. Reliability (internal consistency and health plan level)
 3. Item discrimination across scales or composites
 4. Construct validity

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Additional Study Objectives:

- Assess associations of provider and enrollee characteristics with:
 1. Global ratings of care & plans
 2. Reports about care

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Methods: Data Collection

- Random sample of 4-18 year-old children continuously enrolled in 5 California SCHIP dental plans for 12 months or longer drawn according to modified NCQA/CAHPS® 2.0H protocols
- Data collection conducted by DataStat
- Surveys mailed to caregivers in English, Spanish, Chinese, Korean or Vietnamese based on primary language designated on Healthy Families Program applications

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Data Collection Results

- Usable4 Surveys:
 - 2,536 (2001)
 - 2,232 (2002)
- Response rates:
 - 50% (2001)
 - 56% (2002)
- Final pooled sample:
 - 4,036 SCHIP enrollees who used SCHIP dental plan for all / most of their dental care

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DCAHPS® Psychometric Analysis

- Reports About Care (Composites):
 - Getting needed care (*4 items*)
 - Getting care quickly (*5 items*)
 - Dental providers' communication (*5 items*)
 - Office staff (*2 items*)
 - Dental plan customer service (*3 items*)

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DCAHPS® Psychometric Analysis

- ✓ Item missing data
- ✓ Reliability (internal consistency and health plan level)
- ✓ Item discrimination across scales or composites
- ✓ Construct validity

Results in press: Medical Care

Methods: Statistical Analysis

- *Reports About Care and Global Ratings were regressed on:*
 - *Years in plan*
 - *Type of regular dentist (pediatric / general dentist)*
 - *ER use*
 - *Dental care use*
 - *Survey language*
 - *Child's reported dental health*
 - *Presence of child emotional, developmental or behavioral problems*
 - *Child's age, gender and race/ethnicity*
 - *Parent's age, gender and educational attainment*

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Got Needed Dental Care

		Sum of	Mean				
Source	DF	Squares	Square	F Value	Pr > F		
Model	29	419282	14458	22.07	<.0001		
Error	3339	2187778	655.21957				
Corrected Total	3368	2607060					
Root MSE	25.59726	R-Square	0.1608				
Dependent Mean	77.25339	Adj R-Sq	0.1535				
Coeff Var	33.13415						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate
Intercept	Intercept	1	82.90144	2.54925	32.52	<.0001	0
noD	no dentist	1	-8.05789	1.03388	-7.79	<.0001	-0.13104
spanish	rlang=Spanish	1	-5.65966	1.27083	-4.45	<.0001	-0.10141
excel	dental health=excellent	1	10.66724	1.32528	8.05	<.0001	0.14690
vgood	dental health=very good	1	7.41369	1.12441	6.59	<.0001	0.12258
fair	dental health=fair	1	-11.42929	1.35554	-8.43	<.0001	-0.15152
poor	dental health=poor	1	-27.86600	2.75234	-10.12	<.0001	-0.16751
r54	have emot or behav prob (154)	1	-4.68507	2.15461	-2.17	0.0297	-0.03518
lths	parent's educ < HS	1	3.97397	1.26115	3.15	0.0016	0.06682
hsgrad	parent's educ = HS or GED	1	2.54675	1.14309	2.23	0.0259	0.04145

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Communication by Dental Providers

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	29	380953	13136	26.42	<.0001		
Error	3009	1496157	497.22720				
Corrected Total	3038	1877110					
Root MSE	22.29859	R-Square	0.2029				
Dependent Mean	75.66871	Adj R-Sq	0.1953				
Coeff Var	29.46871						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate
Intercept	Intercept	1	68.67374	2.36219	29.07	<.0001	0
pediD	pediatric dentist	1	4.65961	1.20405	3.87	0.0001	0.06622
othrD	other dentist	1	-23.34496	4.50928	-5.18	<.0001	-0.08484
noD	no dentist	1	-7.69561	0.96665	-7.96	<.0001	-0.13642
I24	#times went to office/clinic in last yr	1	1.71136	0.35256	4.85	<.0001	0.07979
excel	dental health=excellent	1	14.87209	1.20963	12.29	<.0001	0.23200
vgood	dental health=very good	1	8.92898	1.02655	8.70	<.0001	0.16678
fair	dental health=fair	1	-6.38804	1.27193	-5.02	<.0001	-0.09261
poor	dental health=poor	1	-14.72126	2.60349	-5.65	<.0001	-0.09598
racegrp1	White	1	6.20824	1.31095	4.74	<.0001	0.10214
p_male	parent's gender	1	-2.41690	1.20337	-2.01	0.0447	-0.03399
lths	parent's educ < HS	1	2.82861	1.15896	2.44	0.0147	0.05250 ₁₁

Ratings of Dentists

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F		
Model	29	396312	13666	33.86	<.0001		
Error	2969	1198463	403.65889				
Corrected Total	2998	1594776					
Root MSE	20.09126	R-Square	0.2485				
Dependent Mean	77.98933	Adj R-Sq	0.2412				
Coeff Var	25.76155						
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Standardized Estimate
Intercept	Intercept	1	66.23037	2.14400	30.89	<.0001	0
pediD	pediatric dentist	1	5.23983	1.09170	4.80	<.0001	0.08032
othrD	other dentist	1	-19.32913	4.14620	-4.66	<.0001	-0.07468
noD	no dentist	1	-6.40424	0.87705	-7.30	<.0001	-0.12238
I24	#times went to office/clinic in last yr	1	1.79485	0.31941	5.62	<.0001	0.09027
spanish	rlang=Spanish	1	4.97412	1.05630	4.71	<.0001	0.10713
excel	dental health=excellent	1	13.81375	1.09559	12.61	<.0001	0.23279
vgood	dental health=very good	1	8.55273	0.93093	9.19	<.0001	0.17225
fair	dental health=fair	1	-8.34752	1.15687	-7.22	<.0001	-0.13010
poor	dental health=poor	1	-27.23876	2.35959	-11.54	<.0001	-0.19148
r54	have emot or behav prob (i54)	1	-3.74456	1.86707	-2.01	0.0450	-0.03258
racegrp1	White	1	2.84110	1.18656	2.39	0.0167	0.05033
racegrp8	Black	1	-5.98025	2.70018	-2.21	0.0269	-0.03690
age65	parent's age 65	1	13.22317	6.47050	2.04	0.0411	0.03306
lths	parent's educ < HS	1	5.00796	1.05150	4.76	<.0001	0.10003 ₁₂
hsgrad	parent's educ = HS or GED	1	3.02044	0.94000	3.21	0.0013	0.05928

Results Summary

- More negative experiences (reports) with dental care were observed for children with:
 - no regular dentist
 - worse dental health
 - fewer dental visits
 - non-white caregivers
 - caregivers with high school education or higher
 - male parent survey respondent
- Spanish language respondents reported more negative experiences with getting needed care and customer service, but rated dentists and plans more positively than English respondents.

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Results Summary

- Regression models using dummy variables to indicate whether the parent was able to be present in the room when the child was being treated suggest that this is an important variable.
 - Caregivers who wanted to be present but weren't allowed to be were less pleased with care.
 - Caregivers who wanted to be present and were always in the room tended to be most pleased with care.

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Conclusions

- This study revealed important differences in California SCHIP enrollee caregivers' perceptions of dental care associated with having a regular dentist, utilization, health, race, gender, language and caregivers' education level.
- Beta version of the instrument performed well
- Revised version recommended for future studies

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